

**VARIATION OF EBURNEOUS RIDGE CHARACTER IN
EBURIA HALDEMANI LE CONTE (COLEOPTERA: CERAMBYCIDAE)
FROM NORTHERN TEXAS**

STEVEN W. LINGAFELTER

Department of Biology, Midwestern State University, Wichita Falls, Texas 76308

The elytral ivory-colored prominences (eburneous ridges) are an important character in identifying the genus *Eburia*. Variability of this character within *E. haldemani* Le Conte, however, lessens its taxonomic importance at the species level.

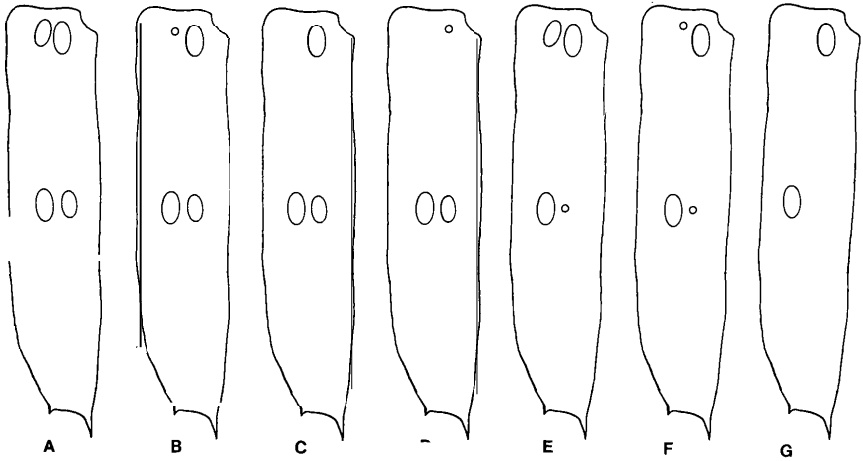


FIGURE 1. Left elytra representative of each of the seven morphotypes of *Eburia haldemani* documented from Archer and Wichita counties, Texas.

Seventy specimens of *E. haldemani* from the adjacent counties of Archer and Wichita in northern Texas were examined and separated into seven morphotype classes as identified by patterns of the elytral eburneous ridges (Fig. 1). The relative abundance of each of the morphotype classes is shown in Figure 2. These ridges occur in two positions on the elytra—basally and medially. The majority (73 percent) of *E. haldemani* specimens examined have these ridges paired (geminately) at both positions on each elytron (Figs. 1A, 1B, 1E, and 1F). Specimens have been examined that show a reduction in size or number of basal eburneous ridges (Figs. 1B-1D), or both, whereas the median eburneous ridges appear as in the most common morphotype (Fig. 1A). Alternatively, some specimens have the inner-median eburneous ridge reduced in size (Fig. 1E), but the basal eburneous ridges are unchanged from the condition represented in Figure 1A. Some specimens exhibit concurrent

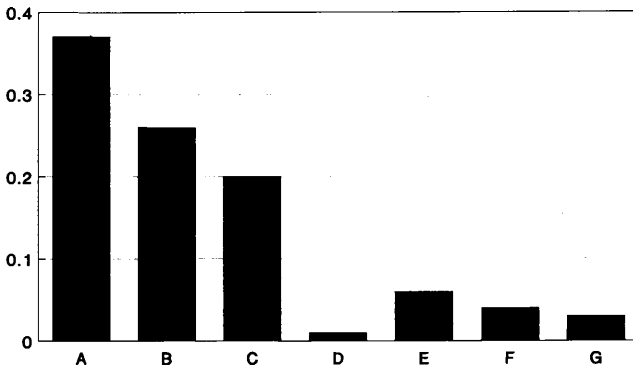


FIGURE 2. Frequency histogram for each of the seven morphotypes represented by 70 specimens of *Eburia haldemani* from Archer and Wichita counties, Texas. Letters correspond to elytra patterns illustrated in Figure 1.

reduction in size, or a complete absence of both the **outer-basal** and inner-median eburneous ridges (Figs. 1F, 1G).

The **existence** of the morphotype without **geminate** median eburneous ridges (Fig. 1G) necessitates a slight modification of **Linsley's** (1962:56) key to the genus. In key couplet 9a, he stated that ". . . the median eburneous elytral ridges are sometimes small but always **geminate**" Based on this character, specimens of this morphotype would not be identified correctly. Couplet 9a should be modified to read: ". . . median eburneous elytral ridges usually geminate, but sometimes evanescent or occurring singly, or both. . . ."

Specimens utilized in this study are deposited in the collection of the author and the invertebrate collection of Midwestern State University. Gratitude is expressed to Drs. Norman Horner and Frederick Stangl for use of the facilities and beneficial critique and suggestions for the study.

LITERATURE CITED

- Linsley, E. G. 1962. The Cerambycidae of North America, part 2, taxonomy and classification of the subfamily Cerambycinae, tribes Opsimini through Megaderini. Univ. California Publ. Entomol., 20:1-188.